

Massachusetts Water Resources Commission

Meeting Minutes for November 9, 1995

Commission Members in Attendance:

Sharon McGregor	Designee, EOE A Secretary
Marilyn Contreas	Designee, EOCD Secretary
Peter Webber	Department of Environmental Management
Richard Thibedeau	Designee, Department of Environmental Management
Mark Tisa	Designee, Department of Fisheries, Wildlife and Environmental Law Enforcement
Lee Corte-Real	Designee, Department of Food and Agriculture
Patricia Austin	Designee, Metropolitan District Commission
Jane Mead	Designee, Coastal Zone Management
Richard Butler	Public Member
Paul C. Bucknam Jr.	Public Member
Bob Zimmerman	Public Member
Gary Clayton	Public Member
Francis Veale	Public Member

Others in Attendance:

Ronald Hall	MFBB, Bedford
Peter Phippen	DEM/OWR
Bob Hartzel	DEM
Eileen Simonson	WSCAC
Nancy Kurtz	MWRA
Gretchen Roorbach	MWRA
Mike Conner	MWRA
Karen Pelto	DFWELE
Mike Rapacz	DEP
Mike Gildesgame	DEM
Kate Bowditch	CRWA
Michele Drury	DEM
Mary Ann Nelson	DEM
Steve Asen	DEM
Jeffrey Hanson	Bluestone Energy Services
Sarah Weinstein	DEP
Ralph Child	Palmer and Dodge
Marie Studer	Mass Bays Program
Dave Terry	DEP/DWS
Pamela Harvey	DEP/OGC

Keith McCoy	AIM
Lealdon Langley	DEP/WMP
John Murphy	Bluestone Energy Services
Beth McCann	DEP/OWM
Charles J. Sisitsky	Town of Natick Public Works
Donald Tata	Tata and Howard
Jack Perodeau	Town of Natick Water Dept.
Fred Conley	Town of Natick

Item 1: Adoption of the Minutes of October 12, 1995. Clayton added that under Agenda Item 3 (drought conditions), he had asked if staff could evaluate existing information from ongoing river monitoring to give a sense of their environmental conditions due the drought. This should be included as part of the drought condition report. [Following Peltó's comments, below, it was agreed that that presentation fulfilled the request, and will be continued.]

Item 2: Executive Director's Report. McGregor stated that the watershed forum was held on Oct 19th. Response to the watershed approach for statewide implementation was positive. It was noted we have to work more closely with municipalities and businesses so that they can do a better job at environmental protection. Open Space Bond: Gildesgame stated that the House version of the Bill continues funding for the USGS, but Senate version does not. USGS's programs are important for collect basic hydrological data and analysis that the Commission and many other depend on.

Item 3: Drought Condition report. Phippen stated that October's precipitation was very heavy in the western part of the state (more than 12-13 inches). The eastern portion received 6-7 inches; the Cape had the lightest rain fall, about 5 inches. The rainfall has reduced the yearly precipitation deficits. The Connecticut River valley's annual precipitation is above normal, after 9-10 months of below normal readings. Ground water levels across the state are rising. The Office of Water Resources receives information from about 100 observation wells across state. 57% of the wells have below normal levels; 43% are above normal. The water table is coming up, but it is still below normal. Streamflow has been high; the western part of state had very high flows, 0-25% flow duration (Flow duration is the percent of time a given flow is equaled or exceeded, i.e., at 25% flow duration, one can expect that this flow level or greater will be there 25% of the time. The higher the flow, the lower the percent flow duration). The eastern part of the state had a 50-60% flow duration. Eastern flows have come down a bit; they are now in the 70% duration level. We are in the normal range for streamflow now and if normal rainfall continues, this should continue.

Water Supply: There was one addition to DEP Public Water Supply Emergency list because of dry conditions. Reservoirs across the state are in the slightly below normal to normal range. Water supply managers with reservoirs are concerned that we have normal rainfall this winter because they need to fill their reservoirs to make it through another dry summer. Quabbin is 85% full. MDC says that this normal for this time of year. The rain was beneficial for agricultural water use. Fire danger is low.

Fisheries: The effects of this year's weather will not be felt until next year. Stress from the summer hurt fish. During the fall spawning season, high flows resulted in overland runoff, which lowered pH, which further stressed fish. Therefore eggs will be stressed. Water Quality: Storm water runoff from the rain resulted in the transport of petroleum products and bacteria into streams. This had negative effects on water quality. Treatment plants exceeded their capacity, resulting in overflow of CSOs. Simonson stated that DEM should get in touch with municipal health boards to collect information on

private wells. Many private wells in the western part of the state went dry. This can be an indicator of drought conditions. Phippen cautioned that this dry spell should not be called a drought until there is more time to detect a trend. We don't know if this is just a period where rainfall is below normal or if these rainfall events are just unusual occurrences within a drought. The system may be coming back so quickly because it really wasn't as bad as it was thought to be.

Clayton asked if existing stations that are representative and associated with stressed conditions can be used to provide an ongoing assessment of water quality conditions. Phippen answered that DEM and USGS have discussed it, but additional programs are dependant on the USGS funding being approved in the Open Space bond. Austin said that the MDC monitors some stations in their watershed. She will look into getting the information for the WRC by next meeting.

Marine Fisheries: Pelto reported on drought impacts to marine fisheries. There have been problems with out-migration of anadromous fish in the fall. Fish have been stranded in headwater ponds because the outlet was dry. Other problems include impoundments with leaky dams; water was going through rather than over and fish were trapped behind. Recent rainfalls have abated this problem in SE Mass, but it still a problem on the Cape. Dry stream beds below dams on the Cape are also a problem. Clayton said that this sort of report gives an indication of the impact of dry conditions on biota. This should be continued.

Army Corps of Engineers: The WRC had asked the ACOE to research potential users downstream of their facilities. Phippen reported that ACOE cannot do this, but it should be an issue for the drought task force, which consists of all the environmental agencies, EOCD, and other interested parties.

Clayton moved, seconded by Thibedeau, that

TO BETTER UNDERSTAND CURRENT DROUGHT CONDITIONS, STAFF CONTINUE TO MONITOR AND REPORT THE STATUS OF PRECIPITATION, STREAMFLOWS, GROUND WATER LEVELS, RESERVOIRS, AND OTHER INDICATORS, AND WILL REPORT REGULARLY TO THE COMMISSION. TO PLAN FOR WRC ACTIONS IN THE CASE OF FUTURE DROUGHTS, THE EXECUTIVE DIRECTOR WILL RECONVENE THE DROUGHT MANAGEMENT TASK FORCE WITH THE FOLLOWING MISSION:

- TO ASSESS THE CURRENT DROUGHT MANAGEMENT EFFORT IN THE STATE BY LOOKING AT THE PROCEDURES IN PLACE BY WATER SUPPLIERS AND OTHERS, INCLUDING THE ARMY CORPS OF ENGINEERS.
- TO DEVELOP ADDITIONAL OPTIONS FOR A VARIETY OF WATER USERS PUBLIC WATER SUPPLIERS, AGRICULTURE, FIRE FIGHTING, ETC.
- TO DEVELOP OR MODIFY AS APPROPRIATE, STATEWIDE POLICY(IES) OR GUIDELINES, INCLUDING LEGISLATION, FOR ADDRESSING DROUGHT PROBLEMS AND WAYS TO AVOID WATER SHORTAGES AND UNNECESSARY ENVIRONMENTAL IMPACTS.
- REPORT BACK TO THE COMMISSION WITH AN ASSESSMENT AND RECOMMENDATIONS FOR ACTIONS, POLICIES, PROCEDURES TO BE ADOPTED BY THE WRC, ITS CONSTITUENT AGENCIES, OR OTHERS.

The motion passed unanimously.

Item 4: Proposed changes to 314 CMR 4.00 water quality regulations. Gottlieb led the discussion of the proposed changes from the existing total recoverable metal concentration criteria standard to the EPA-approved dissolved metal criteria. Veale stated that the total recoverable standard was unattainable because the technology did not exist. Studer discussed the Marine Science Advisory Board's memo opposing the change. It was pointed out that there were some treatment plants in compliance with the present standard. To this was countered that these plants discharge to water bodies where there is more available flow, therefore the dilution factor of the receiving water is greater, making compliance possible. More technical and economic arguments were discussed.

The WRC's intent was to ensure that the proposed regulatory change was adopted within the context of the watershed approach. The main concerns were twofold: (1) that the WRC work to ensure that this regulatory change is indeed an interim step, and that site-specific criteria for total and dissolved metals be developed as soon as possible, and (2) that we work to ensure that public dollars are allocated to the primary sources of water quality degradation, be they POTWs, other point-sources or non-point sources.

A motion was proposed by McGregor and seconded by Bucknam:

WHEREAS, THE OVERALL INTENT AND GOAL OF WATERSHED PROTECTION IS TO REDUCE THE LOADING OF METALS TO THE SYSTEM FROM POINT AND NON-POINT SOURCES; AND

WHEREAS, THE ADOPTION OF DISSOLVED METALS CRITERIA WILL RESULT IN FURTHER REDUCTIONS OF PRESENT DAY DISSOLVED METALS DISCHARGES FROM POINT-SOURCES AND IS AN INTERIM STEP TOWARD THE ADOPTION OF APPROPRIATE AND ATTAINABLE DISCHARGE PERMIT LIMITS; AND

WHEREAS, THE EPA AND STATE ARE EXPLORING THE DEVELOPMENT OF BIOLOGICAL AND SEDIMENT QUALITY STANDARDS; IT IS HEREBY MOVED THAT:

- THE STATE WORK TOWARD DEVELOPING SITE-SPECIFIC CRITERIA WHICH CONSIDER DISSOLVED METALS, AS WELL AS TOTAL METALS WHICH, THROUGH FATE AND TRANSPORT, ACCUMULATE IN AQUATIC SYSTEMS AND MAY BECOME BIOAVAILABLE (THROUGH, FOR EXAMPLE, CHANGES IN SEASONAL CHEMISTRY AND SALINITY);
- THE DEP AND OTA CONTINUE TO FACILITATE IMPROVED EFFICIENCY OF TREATMENT FACILITIES AND INCREASED SOURCE REDUCTION AND PRETREATMENT OF METALS AND OTHER TOXICS BY DISCHARGERS;
- THE DEP CONVENE A TECHNICAL ADVISORY COMMITTEE TO DEVELOP PROTOCOLS AND PROCEDURES TO APPROPRIATELY IMPLEMENT DISSOLVED METALS CRITERIA;
- THE DEP MAINTAIN MONITORING AND REPORTING REQUIREMENTS FOR TOTAL METALS SO THAT WATERSHED LOADINGS FROM POINT SOURCES CAN BE TRACKED OVER TIME;
- THE WATER RESOURCES COMMISSION ADOPT THE PROPOSED AMENDMENTS TO THE MASSACHUSETTS WATER QUALITY STANDARDS: 314 CMR 4.03(1), 314 CMR 4.03(4), 314 CMR 4.04(2), 314 CMR 4.04(4), 314 CMR 4.05(5)(E), 314 CMR 4.06(1)(D);

Discussion centered on the concern that the "interim" nature of the change in regulations will become long-term; however, most members believed that the motion would achieve the two objectives. Zimmerman proposed an amendment, seconded by Gottlieb that:

- THE DEP REPORT BACK TO THE WRC IN SIX MONTHS, ON PROGRESS WITH IMPLEMENTATION OF THESE ACTIONS AND REGULATIONS.

The amendment was approved.

The motion, as amended, passed 11 to 1.

In addition, the WRC asked the DEP to: (1) increase enforcement of corrosion control through the SDWA; (2) invoke its existing authority, where appropriate, to write NPDES permits to address sediment accumulation concerns -- principally in areas where discharges are in or tributary to shallow depositional areas, such as coastal waters or low-flow, impounded rivers; (3) work toward making monitoring and tracking of metals (including establishing baseline conditions in downstream sediments, and tracking change over time) a condition of NPDES permits; and (4) step up source reduction and pretreatment as a condition of NPDES permits. It was noted that achieving the latter three objectives will greatly benefit from Massachusetts' delegation of NPDES authority. The DEP agreed to work toward these goals.

Item 5: Interbasin Transfer Act Review of Bluestone Energy Systems Inc.'s Proposed Desalinization Plant Mary Ann Nelson reviewed the memo she wrote concerning legal questions asked by the WRC.

She stated that this proposal is subject to the Act. The approval, if granted, is transferrable from Bluestone to another entity. The WRC can require Bluestone to identify the actual entity to which it plans to transfer the interbasin transfer approval, if it has justifiable reasons under the Act. The WRC can review the actual movement of water in the receiving basin, if it has justifiable reasons under the Act. Non-municipal entities can buy water from this plant, if those entities meet the requirements in the WRC approval decision. The WRC can review those purchases. The WRC require can require purchasers of 500,000 gallons per day (gpd) of water or more to meet requirements in the decision even though the usual threshold is 1,000,000 gpd, if it has justifiable reasons under the Act. Under the public bid law, G.L. c. 149, §44A, Bluestone could not build the facility and then transfer it to a public entity unless it met the requirements of the public bid law. However, Bluestone may be able to do this under the state law which allows municipalities to buy water companies, G.L. c.40, §38, or if authorized by the legislature in special legislation. It is important that the actual criteria outlined in the IBT regulations be used when deciding what information to request from Bluestone.

Drury stated that there is no application before us. Bluestone has requested that we give them an idea of how they will be evaluated under the Act. Nelson said the WRC had questions because this is an unusual project. Bucknam requested more information on who Bluestone is. The company's incorporation papers were distributed, and Jeff Hanson described Bluestone. John Murphy reminded the WRC that desalinization was one of the three possible long-term solutions identified by the Task Force convened to look at the problem of water shortages in Brockton and the Taunton River basin. He maintained that the Act did not apply; the interpretation of the definition of Mass Coastal basin was not correct. The regulations state that the Act regulates surface and ground water. These terms are also used in Water Management Act, which is not taking jurisdiction. Murphy maintained that brackish or saline water is not surface or ground water. Pelto stated that transfers of surface and ground water to the Mass Coastal basin have always been treated as interbasin transfers. Terry asked if Bluestone was the proper applicant. Bluestone said yes and that once the plant is ready to transfer water, it would have been turned over to a water authority created by the legislature.

Prior to construction, Bluestone will be able to identify communities which have committed to purchase water from the plant. Thibedeau stated that the WRC should give Bluestone a definitive answer concerning the applicability of the Interbasin Transfer Act soon. Webber suggested that Bluestone respond to Nelson's memo in writing. Murphy said that another reason why this project is not an IBT is that all associated infrastructure of plant will be outside of boundary of Mass Coastal basin. Beach wells will be inland. He was asked if its extraction point was from Mass Coastal basin, to which he replied that basins have always been defined as two dimensional. Nelson stated that it has never been made clear exactly where they will be getting water from. The more information Bluestone can provide WRC, the better. Simonson stated that all this information will be required under MEPA process. The MEPA scope will be furnished to the WRC. The WRC cannot act on an IBT request until after MEPA is satisfied.

| Item 6: Elm Bank Gottlieb reported that the Charles River Watershed Association wrote a letter to McGregor raising issues concerning water withdrawals at Elm Bank. DEP has been investigating the issues, meeting with Natick, and reviewing the three documents governing use of Elm Bank wells (Consent Order, IBT decision, and WMA permit). DEP has prepared a memo, giving the history, the applicable regulatory requirements, and DEP's position. It was suggested that given the lateness of the hour, that the memo be distributed, the WRC review it, and that this item be placed on next month's agenda for a more thorough discussion.

Amended minutes adopted 12/14/05